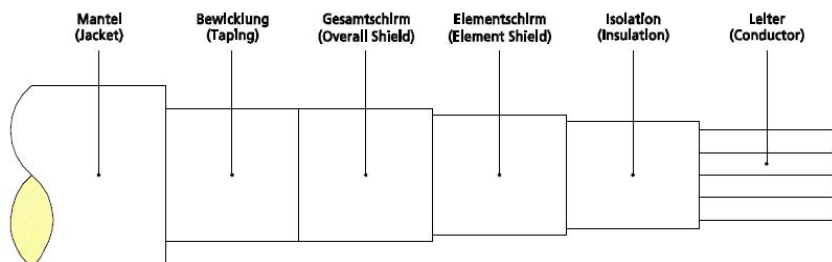
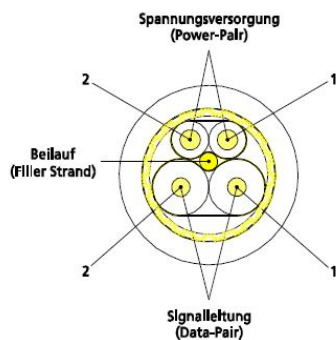
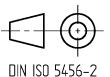


01. Drawing



The information/details in this datasheet merely contain general descriptions or performance factors which, when applied in an actual situation, do not always correspond with the described form, and may be amended by way of the further development of products. The desired performance factors shall only be binding if these are expressly agreed on conclusion of the contract.



02. Application:

Li02YSH2YH-C-11-YH

CAN-Bus/DeviceNET-Line

Description:

as a flexible, flame-retardant, halogen-free and shielded bus-line in the industrial mechanical- and plant engineering, for high requirements, particularly for the employment in cable carriers (drag chains) and moved machine parts.

03. Line construction:

03.01 Litz construction:

Wire material:

Cu-ETP1 tinned acc. to DIN EN 13602

Wire size:

data: 0,25 mm² / AWG 24

power: 0,34 mm² / AWG 22

Litz construction:

data: approx. 19x Ø 0,13 mm

power: approx. 19x Ø 0,15 mm or ca. 19x Ø 0,16mm

03.02. Core insulation:

Style 1926 or 10230 (AWG 22)

Style 10578 or 10493 (AWG 24)

No adhesion between the cores

Wire isolation:

data: foam-skin PE

power: PE or PP

Core-diameter:

data: Ø 2,05 ±0,10 mm

power: Ø 1,40 ±0,05 mm

Number of wires:

4

Correlation Core number-Core color:

Signal-Paar: 1 blue/BU, 2 white/WH

Power-Paar: 1 red/RD, 2 black/BK

wire sequence may change within the pairs

03.07. Element shield:

over every core pair

Material:

Al-PT Foil (Al on the outside)

Covering:

100 %

03.09. shielding:

yes

03.10. Overall shield:

mesh

Diameter:

(approx. Ø 4,90 mm)

Material:

Cu-ETP1 tinned acc. to DIN EN 13602

Covering:

65 ±5 %

03.13. Outer jacket:

Style 20549 or 21198

Surface free from lubricant and grease.

Jacket material:

PUR (halogen-free)

Jacket-diameter:

Ø 6,70 ±0,20 mm

Jacket color:

black matt similarly RAL 9005

Color:

blue or yellow

Printing:

* 253 / ** CAN-Bus/DeviceNET™ Leitung 1x2xAWG24

+ 1x2xAWG22 PUR E*** cURus AWM STYLE ****

VW-1 AWM I/II A/B 80°C 300V FT1 SUITABLE FOR USE

WITHIN EQUIPMENT ONLY

- * = Producer identification
- ** = Production-year and -week
- *** = UL-Producer number
- **** = UL-Style-Number

04. Characteristics:

Lifetime > 20.000 h

04.01 Temperature range:

- in stationary position: - 50 °C - + 80 °C
- flexible: - 25 °C - + 80 °C
- Ambient temperature in the drag chain movement: - 25 °C - + 60 °C

04.02 Electrical characteristics:

at + 20°C

- nominal voltage: ≤ 300 V
- test voltage core/core, (50 Hz, 1 min.): ≥ 2500 V eff. (AWG 22)
≥ 1200 V eff. (AWG 24)
- conductor resistance: max. 82,0 Ω/km @ 0,25 mm²
max. 59,0 Ω/km @ 0,34 mm²
- Insulation resistance: > 8000 MΩxkm
- Inductance per length unit : 0,75 mH/km @ 0,25 mm²
0,54 mH/km @ 0,34 mm²
- Operating capacity per length unit : core/core (data pair): max. 39 pF/m (0,8-1,2 MHz)
core/shield (data pair): max. 79 pF/m (0,8-1,2 MHz)
- Bending radius in stationary position: > 5 x D
- Bending radius in flexible stress: > 10 x D

04.04 Drag chain characteristics:

yes

- Bending cycles *: > 1 Mio.
- permissible acceleration: max. 5 m/s²
- permissible horizontal traverse path: 5 m bei 5 m/s²
- permissible vertical traverse path: 2 m bei 5 m/s²
- permissible traverse speed at 5 m hor. trav. path: max. 200 m/min

* depending on horizontal travel length and acceleration.

05. Burning behavior:

flame retardent

- tests in acc. with: DIN EN 60332-1-2, VDE 0482-332-1-2, IEC 60332-1-2, UL VW-1, CSA FT-1

06. Halogen-free:

- Tests acc. to: DIN EN 50267-2-1, IEC 60754-1, VDE 0482-267-2-1

07. Resistances:

- others: good microbes and hydrolysis resistance
mainly plasticizer diffusion free
good chemical and oil resistance

08. Other characteristics:

Exclusion of dangerous materials acc.:

EU-Directives:

1907/2006/EG, Reach

2011/65/EU, RoHS2

2015/863/EU RoHS3

Line construction acc. CAN-Bus and DeviceNET specification

further legal requirements:

EU-Directive:

2014/35/EU, LVD

others:

Exclusion of PVC and Silicone

free of lacquer wetting disturbing substances

Coldness flexibility

09. Approvals:

Jacket:

UL/CSA

cURus acc. to: AWM Style 20549 or 21198 (80°C / 300V)

Core:

cURus acc. to:

AWM Style 1926 or 10230 / 10578 or 10493 (80°C / 300V)

product overview

Article-No.	Type
000-007-428	STL 253,2x0,25mm ² +2x0,34mm,PE/PUR,sw
000-044-076	STL 253/100 M
934-636-440	STL 253/500 M PUR

Version: 18

Description of changes:

Changed: Material: Cu-ETP1 tinned acc. to DIN EN 13602 in Cu-ETP1 tinned acc. to DIN EN 13602

Changed: Color: yellow or white in blue

Add: others: good microbes and hydrolysis resistance

mainly plasticizer diffusion free

good chemical and oil resistance

Changed: Exclusion of dangerous materials acc.: 2000/53/EG,2011/65/EU,2003/11/EG,1907/2006/EG in EU-

Directives:

1907/2006/EG, Reach

2011/65/EU, RoHS2

2015/863/EU RoHS3

Add: further legal requirements: EU-Directive:

2014/35/EU, LVD

Add: others: Exclusion of PVC and Silicone

free of lacquer wetting disturbing substances

Coldness flexibility

Changed: (Notiz) Line construction acc. CAN-Bus and DeviceNET specification

good microbes and hydrolysis resistance

mainly plasticizer diffusion free

good chemical and oil resistance

Exclusion of PVC and Silicone

free of lacquer wetting disturbing substances

Coldness flexibility in Line construction acc. CAN-Bus and DeviceNET specification